

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

		3A20
		Revision 58
		BEECH
65 (L-23F)	65-A90-1	(JU-21A)
A65		(U-21A)
A65-8200		(RU-21A)
65-80		(RU-21D)
65-A80		(U-21G)
65-A80-8800		(RU-21H)
65-B80	65-A90-2	(RU-21B)
65-88	65-A90-3	(RU-21C)
65-90	65-A90-4	(RU-21E)
65-A90		(RU-21H)
70		
B90		
C90		
C90A		
E90		
H90 (T-44A)		
		March 15, 1999

TYPE CERTIFICATE DATA SHEET NO. 3A20

This data sheet which is part of Type Certificate No. 3A20 prescribes conditions and limitations under which the product for which the type Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Raytheon Aircraft Company
Wichita, Kansas 67201

I. Model 65, Queen Air, (Military L-23F), 7 or 9 PCLM (Normal Category) , Approved February 4, 1959

Engines	2 Lycoming IGSO-480-A1A6 or IGSO-480-A1B6 2 Lycoming IGSO-480-A1E6 (See NOTE 6 (a))
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Fuel	100/130 min. grade aviation gasoline
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Engine Limits	Straight line manifold pressure variation with altitude shown			
	<u>HP</u>	<u>RPM</u>	<u>MP</u>	<u>Alt</u>
Takeoff	340	3400	48.0	S.L.
Takeoff	340	3400	44.0	11,000
Takeoff	340	3400	43.5	11,000 (See NOTE 6 (a))
Max continuous	320	3200	45.0	S.L.
Max continuous	320	3200	41.5	11,000

Propeller and Propeller Limits

1. 2 Hartzell, full-feathering, three-bladed
 - (a) HC-93Z20-2C1 or HC-B3Z20-2A hub with 10151-8R or 10151B-8R aluminum alloy blades and 836 spinner. (see NOTE 6(b)).
Pitch settings at 30 in. sta.: low 16°, high 87°
Diameter: not over 93 in., not under 90 in.
 - (b) Woodward hydraulic governor 210190 or 210635. (see NOTE 6(b))

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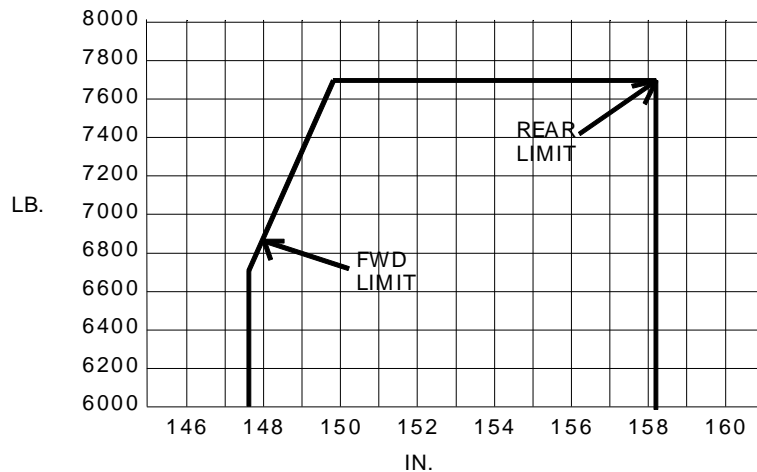
I. Model 65 (cont'd)

Airspeed Limits	Never exceed	270 mph (234 knots)
	Maximum structural cruising	205 mph (178 knots)
	Maneuvering	195 mph (169 knots)
	Flaps extended	150 mph (130 knots)
	Maximum landing gear operating speed: Extension	180 mph (156 knots)
	Retraction	150 mph (130 knots)
	Maximum landing gear extended speed	180 mph (156 knots)

knots)

C.G. Range (Landing Gear Extended)

(+149.9) to (+158.4) at 7700 lb.
 (+147.6) to (+158.4) at 6720 lb. or less
 Straight line variation between points given
 Moment change due to retracting landing gear -2500 in. -lb.



Empty Wt. C.G. Range

None

Maximum Weight

Takeoff - 7700 lbs.
 Landing - 7350 lbs. or 7700 lbs. S/N LC-203 and up, and LC-168 through LC-202 when modified per Beech Kit dwg. 65-4012.

No. of Seats

Maximum 9 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural Limit)

350 lbs. (300 lbs. at +267, 50 lbs. at +288) (aft compartment).
 350 lbs. (+70) (optional nose compartment).

Fuel Capacity

	<u>Tank</u>	<u>Cap. Gal</u>	<u>Usable Gal</u>	<u>Arm</u>
	L & R Main	44 ea.	44 ea.	+174
	L & R Aux	47 ea.	45 ea.	+162
or	L & R Aux	72 ea.	71 ea.	+165
or	L & R Aux	89 ea.	88 ea.	+163

See NOTE 1 for data on unusable fuel.

Oil Capacity data

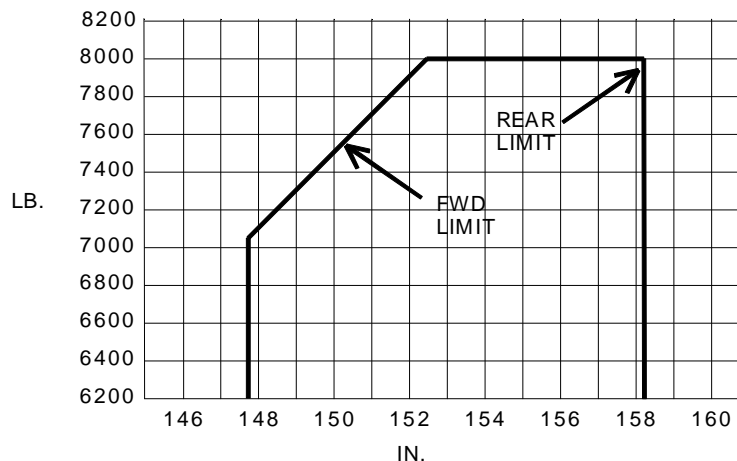
Left nacelle tank, 16 qts (+138), right nacelle tank, 16 qts. (+138). See NOTE 1 for
 on unusable (undrainable) oil.

I. Model 65 (cont'd)

Control Surface Movements	Wing Flaps	Maximum	30°		
	Aileron tabs	Up	7 1/2°	Down	7 1/2° (LH only)
	Aileron tab anti-servo	Up	14°	Down	8°
	Aileron	Up	20°	Down	20°
	Elevator tab	Up	10°	Down	21°
	Elevator tab anti-sevo	Up	12°	Down	8°
	Elevator	Up	25°	Down	15°
	Rudder tab	Right	30°	Left	30°
	Rudder	Right	25°	Left	25°
	Rudder tab servo	Right	1°	Left	1°
Serial Nos. Eligible	L-1, L-2, L-6, LF-7 and up, and LC-1 through LC-239. (L-3, L-4, L-5 eligible when modified per Beech dwg. 50-002017). Prior to civil certification, LF-23F airplanes which have been operated by the military must be modified per BEECH dwg. 50-002016. Type Certificate issued and Delegation Option Manufacturer No. CE-2 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.				

II. Model 65-80, 7 or 9 PCLM (Normal Category), Approved February 20, 1962

Engines	2 Lycoming IGSO-540-A1A			
Fuel	100/130 min. grade aviation gasoline			
Engine Limits	(Straight line manifold pressure variation with altitude shown)			
	<u>HP</u>	<u>RPM</u>	<u>MP</u>	<u>Alt</u>
Takeoff	380	3400	47.0	S.L.
Takeoff	380	3400	43.5	10,500
Max. continuous	360	3200	45.0	S.L.
Max. continuous	360	3200	41.7	10,500
Propeller and Propeller Limits	1. 2 Hartzell, full-feathering, three-bladed			
	(a) HC-B3Z30-2 hub with 10151-8 or 10151B-8 or 10151-8R or 10151B-8R aluminum alloy blades and 836 spinner.			
	Pitch settings at 30 in sta: Low 18 1/4°, ± 1/4°, high 87°, ± 1/2°			
	Diameter: not over 93 in. , not under 90 in.			
	(b) Woodward hydraulic governor A210390			
Airspeed Limits	Never exceed	270 mph (234 knots)		
	Maximum structural cruising	205 mph (178 knots)		
	Maneuvering	195 mph (169 knots)		
	Flaps extended	150 mph (130 knots)		
	Maximum Landing Gear Operating Speed:	Extension	180 mph (156 knots)	
		Retraction	150 mph (130 knots)	
	Maximum Landing Gear Extended Speed:	180 mph (156 knots)		
C.G. Range (Landing Gear Extended)	(+152.8) to (+158.4) at 8000 lb			
	(+147.6) to (+158.4) at 7060 lb or less			
	Straight line variation between points given			
	Moment change due to retracting landing gear -2500 in. -lb.			

II. Model 65-80 (cont'd)

Empty Wt. C.G. Range

None

Maximum Weight

Takeoff - 8000 lb

Landing - 7600 lb. or 8000 lb. (See NOTE 8)

No. of Seats

Maximum 9 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage
(Structural Limit)

350 lb. (300 lb. at +267, 50 lb. at +288)

Fuel Capacity

<u>Tank</u>	<u>Cap Gal</u>	<u>Usable Gal</u>	<u>Arm</u>
L & R Main	44 ea.	44 ea.	+174
L & R Aux	47 ea.	45 ea.	+162
or L & R Aux	72 ea.	71 ea.	+165

See NOTE 1 for data on unusable fuel

Oil Capacity

Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138)

See NOTE 1 for data on unusable (undrainable) oil.

Control Surface Movements

Wing Flaps	Maximum	30°		
Aileron tabs	Up	7 1/2°	Down	7 1/2° (LH only)
Aileron tab anti-servo	Up	14°	Down	8°
Aileron	Up	20°	Down	20°
Elevator tab	Up	10°	Down	21°
Elevator tab anti-servo	Up	12°	Down	8°
Elevator	Up	25°	Down	15°
Rudder tab	Right	30°	Left	30°
Rudder	Right	24°	Left	26°

Serial Nos. Eligible

LD-1 through LD-150 (except LD-34 and LD-46)

III. Model 65-A80, 7 to 11 PCLM (Normal Category), Approved March 26, 1964**Model 65-A80-8800, 7 to 11 PCLM (Normal Category), Approved October 22, 1965**

Engine

2 Lycoming IGSO-540-A1A or IGSO-540-A1D

Fuel

100/130 min. grade aviation gasoline

III. Model 65-A80, Model 65-A80-8800 (cont'd)**Engine Limits**

(Straight line manifold pressure variation with altitude shown)

	<u>HP</u>	<u>RPM</u>	<u>MP</u>	<u>Alt</u>
Takeoff	380	3400	47.0	S.L.
Takeoff	380	3400	43.5	10,500
Max. continuous	360	3200	45.0	S.L.
Max. continuous	360	3200	41.7	10,500

Propeller and Propeller Limits

1. 2 Hartzell, full-feathering, three-bladed
 - (a) HC-B3Z30-2 hub with 10151-8R or 10151B-8R aluminum alloy blades and spinner.
Pitch settings at 30 in. sta.: low $18\frac{1}{4}^{\circ}$, $\pm 1/4^{\circ}$, high 87° , $\pm 1/2^{\circ}$
Diameter: not over 93 in. , not under 90 in.
 - (b) Woodward hydraulic governor A210390; use 210498 with propeller synchronizer

Airspeed Limits

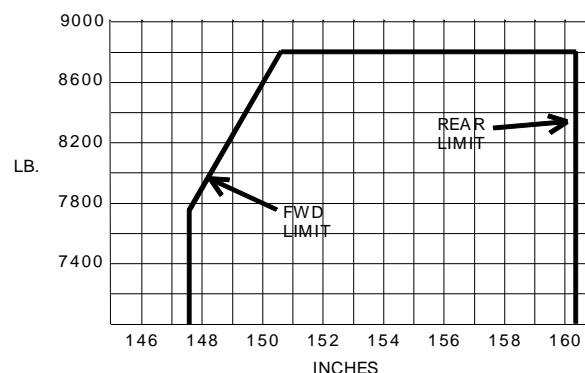
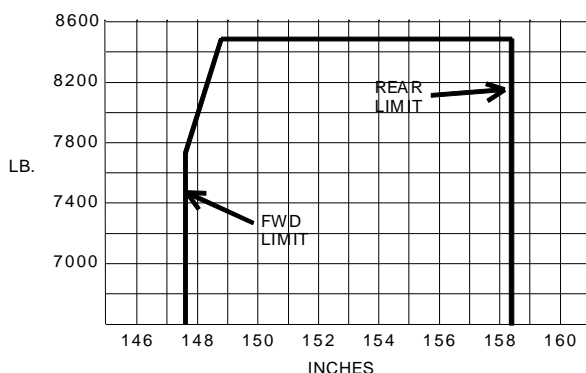
Never exceed	270 mph (234 knots)
Maximum structural cruising	205 mph (178 knots)
Maneuvering	195 mph (169 knots)
Flaps extended	150 mph (130 knots)
Maximum landing gear operating speed: Extension	180 mph (156 knots)
Retraction	150 mph (130 knots)
Maximum landing gear extended speed:	180 mph (156 knots)

C.G. Range (Landing Gear Extended)Model 65-A80

(+149.8) to (+158.4) at 8500 lb.
 (+147.6) to (+158.4) at 7750 lb. or less
 Straight line variation between points given.
 Moment change due to retracting landing gear -2500 in. -lb.

Model 65-A80-8800

(+150.7) to (+160.4) at 8800 lb.
 (+147.6) to (+160.4) at 7750 lb. or less
 Straight line variation between points given
 Moment change due to retracting landing gear -2500 in. -lb.

**Empty Wt. C.G. Range**

None

Maximum WeightModel 65-A80

Takeoff 8500 lb.
 Takeoff 8500 lb.

Model 65-A80-8800

8800 lb (see NOTE 9)
 8800 lb.

No. of Seats

Maximum 11 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural Limit)

350 lb. (+275, aft compartment, except LD-34 and LD-46)
 350 lb. (300 lb. at +267, 50 lb. at +288, LD-34 only)
 (Standard aft compartment)
 300 lb. (+267, LD-46 only) (Standard aft compartment)
 250 lb. (+309) (Optional aft compartment) (65-A80-8800)
 (450 lb. max in both compartments)
 350 lb. (+70) (Optional nose compartment)

III. Model 65-A80, Model 65-A80-8800 (cont'd)

Fuel Capacity	Tank	Cap Gal	Usable Gal	Arm
	L & R Main	44 ea.	44 ea.	+174
	L & R Aux.	47 ea.	45 ea.	+162
or	L & R Aux.	64 ea.	63 ea.	+160
or	L & R Aux.	72 ea.	71 ea.	+165
or	L & R Aux.	89 ea.	88 ea.	+163
See NOTE 1 for data on unusable fuel.				
Oil Capacity	Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138) See NOTE 1 for data on unusable (undrainable) oil.			
Control Surface Movements	Wing flaps	Maximum	30°	
	Aileron tabs	Up	7 1/2°	Down 7 1/2° (LH only)
	Aileron tab anti-servo	Up	14°	Down 8°
	Aileron	Up	20°	Down 20°
	Elevator tab	Up	10°	Down 21°
	Elevator tab anti-servo	Up	12°	Down 8°
	Elevator	Up	25°	Down 15°
	Rudder tab	Right	30°	Left 30°
	Rudder	Right	24°	Left 26°
Serial Nos. Eligible	LD-34, LD-46, LD-151 through LD-269			

IV. Model 65-90, 10 PCLM (Normal Category), Approved May 19, 1964

Engines	2 United Aircraft of Canada, Ltd. PT6A-6 (Turboprop) or 2 United Aircraft of Canada, Ltd. or Pratt & Whitney PT6A-20 (Turboprop) See NOTE 11.
Fuel	JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); JET A, JET A-1, and JET B conforming to P&WC S.B. 1244 or ASTM Spec. D1655. See NOTE 5 for emergency fuels..
Oil (Engine and Gearbox)	UACL PT6 Service Bulletin No. 1 lists approved brand oils.

Engine Limits

Static Sea Level Ratings PT6A-6					
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Max. Permissible Turbine Inlet Temp. (Deg. C.)
Takeoff (5 minutes)	500	62	525	2200*	994
Max. Continuous	500	62	525	2200*	952
Strtg. Trans. (2 seconds)					1038
Max Reverse (1 minute)	300			2100*	750
Static Sea Level Ratings PT6A-20					
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft speed	Max. Permissible Turbine Inlet Temp. (Deg. C.)
Takeoff (5 minutes)	500	68	527	2200*	750
Max. Continuous	500	68	527	2200*	750
Strtg. Trans. (2 seconds)					1090
Max Reverse (1 minute)	300			2100*	750

See NOTE 4 At low altitude and low ambient temperature the engines may produce more power at takeoff than the airplane has been certificated for. Under these conditions, the placarded torquemeter limitations shall not be exceeded.

IV. Model 65-90 (cont'd)

Oil Temperature PT6A-6	Plus 32°F to 185°F max continuous Maximum 195°F not to exceed 5 minutes Minus 40°F minimum starting
PT6A-20	Plus 50° F to 200° F max. continuous Minus 40°F to 200°F low idle Maximum 210°F not to exceed 5 minutes Minus 40°F minimum starting

Propeller and Propeller Limits
(See NOTES 12 & 13)

Non Reversing Propeller:

2 Hartzell HC-B3TN-2/T10173B-8 or HC-B3TN-2(B)/T10173B-8 or
HC-B3TN-2M/ T10173NB-8 with three blades each.

Diameter: 93.5 in. (nominal) Min. allowable for repair 91.5 in.

(No further reduction permitted).

Pitch settings at 30 in. sta.: low 19°, feathered 87°

Reversing Propeller:

2 Hartzell HC-B3TN-3B/T10173E-8 or HC-B3TN-3M/T10173NB-8 with three
blades each

Diameter: 93-3/8 in. (nominal). Min. allowable for repair 90-3/8 in.

(No further reduction permitted)

Flight idle stop (See NOTE 10)

Secondary flight idle stop (See NOTE 10)

Reverse -11°

Feather -87°

Airspeed Limits

Maximum operating speed	240 mph (208 knots)
Maneuvering	195 mph (169 knots)
Flaps extended	150 mph (130 knots)
Maximum landing gear operating speed : Extension	180 mph (156 knots)
Retraction	150 mph (130 knots)
Maximum landing gear extended speed	180 mph (156 knots)

knots)

C.G. Range (Landing Gear
Extended)

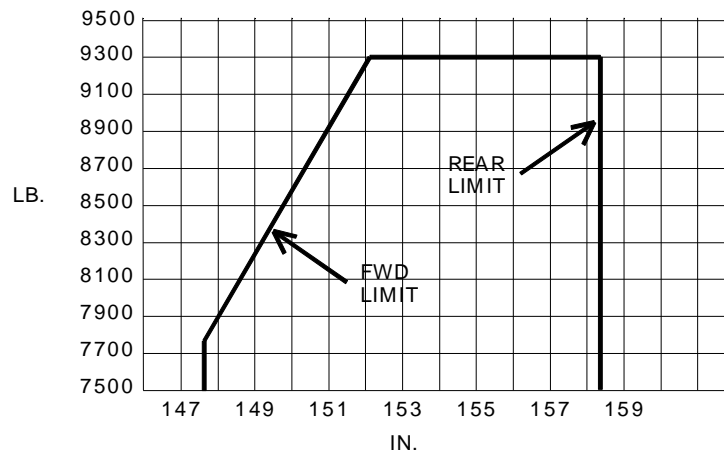
(+152.2) to (+158.4) at 9300 lb. (See NOTE 7)

(+151.3) to (+158.4) at 9000 lb.

(+147.6) to (+158.4) at 7750 lb. or less

Straight line variation between points given

Moment change due to retracting landing gear -3530 in. -lb.



Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 9000 or 9300 lb. (See NOTE 7)

Landing 8550 or 8835 lb. (See NOTE 7)

IV. Model 65-90 (cont'd)

No. of Seats	Maximum 10 (2 crew at +129). See loading instructions for passenger loading.			
Maximum Baggage	350 lb. (+275)			
Fuel Capacity	<u>Tank</u>	<u>Cap Gal</u>	<u>Usable Gal</u>	<u>Arm</u>
	L & R Nacelle	61 ea.	61 ea.	+131
	L & R Wing	131 ea.	131 ea.	+167
	See NOTE 1 for data on unusable fuel.			
Oil Capacity	28 qt. total (+101) (includes 20 qts. usable in two integral engine tanks). See NOTE 1 for data on unusable oil.			
Max Oper Limit	30,000 ft. pressure altitude			
Control Surface Movements	Wing flaps	Maximum	43°	
	Aileron Tab	Up	7 1/2°	Down 7 1/2° (LH only)
	Aileron tab anti-servo	Up	14°	Down 8°
	Aileron	Up	20°	Down 20°
	Elevator Tab	Up	10°	Down 21°
	Elevator Tab anti-servo	Up	12°	Down 8°
	Elevator	Up	25°	Down 15°
	Rudder Tab	Right	30°	Left 30°
	Rudder	Right	24°	Left 26°
Serial Nos. Eligible	LJ-1 through LJ-113 (except LJ-76)			

V. Model 65-88, 10 PCLM (Normal Category), Approved September 21, 1965

Engines	2 Lycoming IGSO-540-A1D			
Fuel	100/130 minimum grade aviation gasoline			
Engine Limits	(Straight line manifold pressure variation with altitude shown)			
	<u>HP</u>	<u>RPM</u>	<u>MP</u>	<u>Alt</u>
Takeoff	380	3400	47.0	S.L.
Takeoff	380	3400	43.5	10,500
Max. continuous	360	3200	45.0	S.L.
Max. continuous	360	3200	41.7	10,500
Propeller and Propeller Limits	1. 2 Hartzell, full-feathering, three-bladed			
	(a) HC-B3Z30-2 hub with 10151-8R or 10151B-8R aluminum alloy blades and 836 spinner.			
	Pitch settings at 30 in. sta.: low $18\ 1/4^{\circ} \pm 1/4^{\circ}$			
	high $87^{\circ} \pm 1/4^{\circ}$			
	Diameter: not over 93 in. , not under 90 in.			
	(b) Woodward hydraulic governor A210390 (use 210498 with propeller synchronizer)			
Airspeed Limits	Never exceed	270 mph (234 knots)		
	Maximum structural cruising	205 mph (178 knots)		
	Maneuvering	195 mph (169 knots)		
	Maximum flap extension speed			
	Approach position - 50%	200 mph (174 knots)		
	Full down flap psn. - 100%	150 mph (130 knots)		
	Maximum landing gear operating speed: Extension	180 mph (156 knots)		
		Retraction	150 mph (130 knots)	
	Maximum landing gear extended speed	180 mph (156 knots)		
knots)				

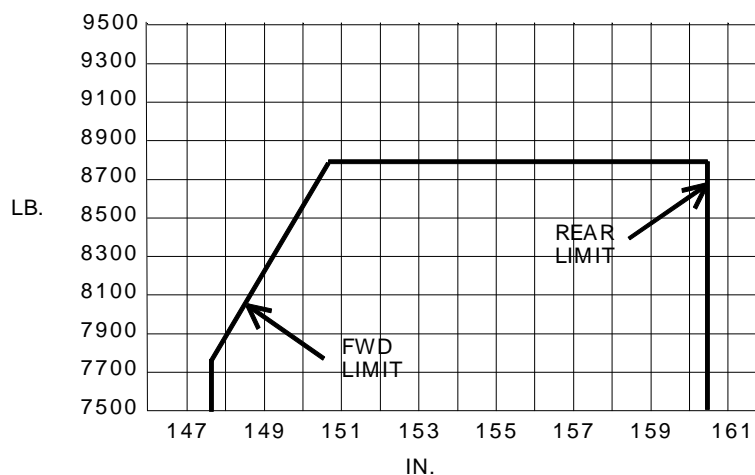
V. Model 65-88 (cont'd)C.G. Range (Landing Gear
Extended)

(+150.7) to (+160.4) at 8800 lb.

(+147.6) to (+160.4) at 7750 lb. or less

Straight line variation between points given

Moment change due to retracting landing gear -2050 in. -lb.



Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 8800 lb
Landing 8800 lb

No. of Seats

Maximum 10 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage
(Structural Limit)

350 lb. (+275)

Fuel Capacity

<u>Tank</u>	<u>Cap Gal</u>	<u>Usable Gal</u>	<u>Arm</u>
L & R Main	44 ea.	44 ea.	+174
L & R Aux	89 ea.	88 ea.	+162
L & R Wing	134.5 ea.	132 ea.	+166

or
See NOTE 1 for data on unusable fuel

Oil Capacity

Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138). See
NOTE 1 for data on unusable (undrainable) oil.

Control Surface Movements

Wing flaps	Maximum	30°		
Aileron Tab	Up	7 1/2°	Down	7 1/2° (LH only)
Aileron tab anti-servo	Up	14°	Down	8°
(S/N LP-1 thru LP-45)				
Aileron	Up	20°	Down	20°
Elevator Tab	Up	10°	Down	21°
Elevator tab anti-servo	Up	12°	Down	8°
Elevator	Up	25°	Down	15°
Rudder tab	Right	30°	Left	30°
Rudder		Right	24°	Left 26°

Serial Nos. Eligible

LP-1 through LP-47 (except LP-27 and LP-29)

(2) After incorporation of S.I. 0539-381

VI. Model 65-B80 (cont'd)

Oil Capacity

Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138)
See NOTE 1 for data on unusable (undrainable) oil.

Control Surface Movements

Wing Flaps	Maximum	30°		
Aileron Tab	Up	7 1/2°	Down	7 1/2° (LH only)
Aileron tab anti-servo (S/N LD-270 thru LD-368)	Up	14°	Down	8°
Aileron	Up	20°	Down	20°
Elevator tab	Up	10°	Down	21°
Elevator tab anti-servo	Up	12°	Down	8°
Elevator	Up	25°	Down	15°
Rudder tab	Right	30°	Left	30°
Rudder	Right	24°	Left	26°

Serial Nos. Eligible

LD-270 through LD-511

VII. Model 65-A90, King Air, 10 PCLM (Normal Category), Approved March 7, 1966

Engines

2 United Aircraft of Canada, Ltd. or Pratt & Whitney, PT6A-20 (Turboprop)

Fuel

JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); Jet A, Jet A-1, and Jet B
conforming to P&WC S.B. 1244 or ASTM Spec. D1655.
See NOTE 5 for emergency fuels.

Oil (Engine and Gearbox)

UACL PT6 Service Bulletin No. 1 lists approved brand oils.

Engine Limits

Static Sea Level Ratings					
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop. Shaft Speed	Max. Permissible Turbine Interstage Temp. (Deg. C.)
Takeoff (5 minutes)	500	68	527	2200*	750
Max Continuous	500	68	527	2200*	750
Strtg. Trans. (2 seconds)					1090
Max. Reverse (1 minute)	300			2100	750
Static Sea Level Ratings (See NOTES 17 & 19)					
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop. Shaft Speed	Max. Permissible Turbine Interstage Temp. (Deg. C.)
Takeoff (5 minutes)	550	72	579	2200*	750
Max. Continuous	550	72	579	2200*	750
Strtg. Trans. (2 seconds)					1090
Max. Reverse (1 minute)	300			2100	750

*See NOTE 4

At low altitudes and low ambient temperature the engines may produce more power at takeoff than for which the airplane has been certificated. Under these conditions the placarded torquemeter limitations shall not be exceeded.

Oil Temperatures: -40°F minimum starting
-40°F to 200°F low idle
50°F to 200°F max continuous
210°F max oil temperature not to exceed 5 minutes.

Oil Temperatures: -40°F minimum starting
(see NOTES 17 -40°F to 210°F low idle

& 19)

50°F to 210°F

max continuous

VII. Model 65-A90 (cont'd)

Propeller and Propeller Limits

Non Reversing Propeller:

2 Hartzell HC-B3TN-2 (b)/T10173B-8 or HC-B3TN-2M/T10173NB-8
 Diameter: 93 3/8 in. (Nominal) minimum allowable for repair 90 3/8 in.
 (no further reduction permitted)
 Pitch settings at 30 in. Sta.: Low 19°, Feather 87°

Reversing Propeller:

2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with
 T10173E8 or T10173B8 or T10173NB-8 blades.
 Diameter: 93-3/8 in. (nominal) minimum allowable for repair 90-3/8 in
 (no further reduction permitted)
 Pitch Settings at 30 in. Sta.:
 Flight idle stop (See NOTE 10)
 Secondary flight idle stop (See NOTE 10)
 Reverse -11°
 Feather 87°

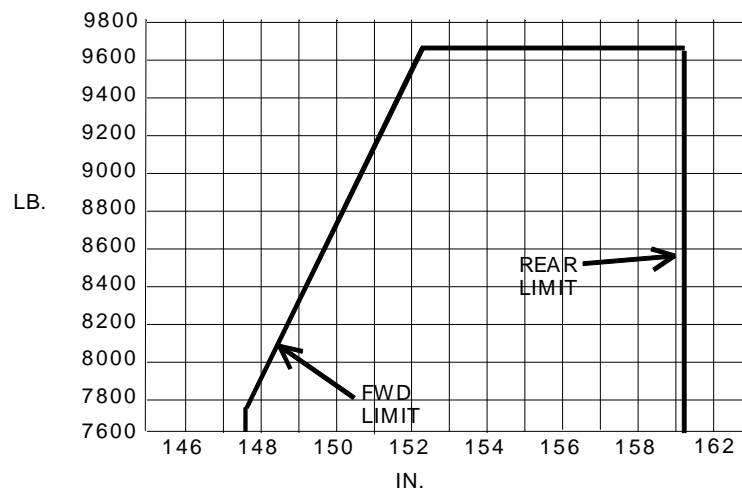
Airspeed Limits

Max Operating Speed	240 mph (208 knots)
Maneuvering Speed	195 mph (169 knots)
Flaps extended speed	150 mph (130 knots)
Maximum landing gear operating speed: Extension	180 mph (156 knots)
Retraction	150 mph (130 knots)
Maximum landing gear extended speed	180 mph (156 knots)

knots)

C.G. Range (Landing Gear Extended)

(+153.2) to (+160.4) at 9650 lb. (See NOTE 17)
 (+152.2) to (+160.4) at 9300 lb.
 (+147.6) to (+160.4) at 7750 lb. or less
 Straight line variation between points given
 Moment change due to retracting landing gear -3411 in. -lb.



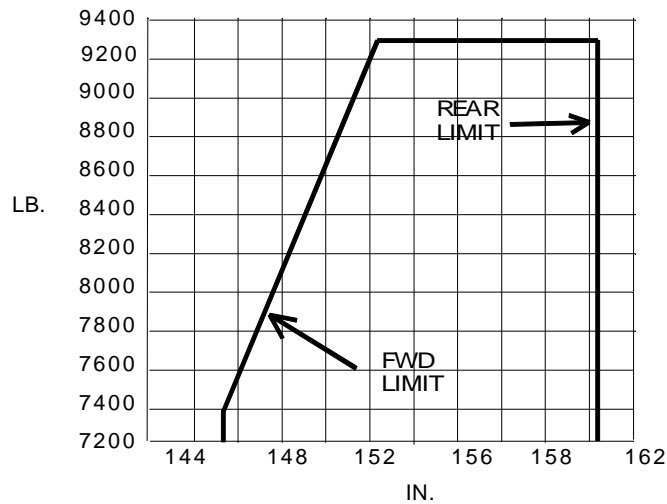
II. Model 65-A90 (cont'd)

(+152.2) to (+160.4) at 9300 lb.

(+144.7) to (+160.4) at 7400 lb. or less (See NOTE 18)

Straight line variation between points given.

Moment change due to retracting landing gear -3825 in. -lb.

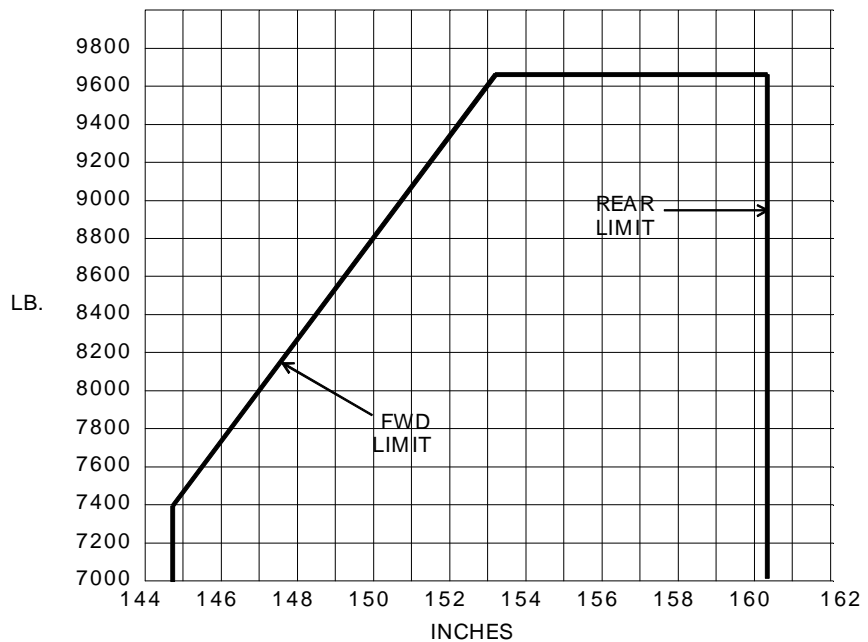


(+153.2) to (+160.4) at 9650 lb. (See NOTE 19)

(+144.7) to (+160.4) at 7400 lb. or less (See NOTE 19)

Straight line variation between points given.

Moment change due to retracting landing gear -3825 in. -lb.



Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 9300 lb.

Takeoff 9650 lb. (See NOTE 17 & 19)

Landing 8835 lb.

Landing 9168 lb. (See NOTE 17 & 19)

No. of Seats

Maximum 10 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural limit) 350 lb. (+275)

VII. Model 65-A90 (cont'd)

Fuel Capacity	Tank	Cap. Gal.	Usable Gal	Arm
	L & R Nacelle	61 ea.	61 ea.	+131
	L & R Wing	131 ea.	131 ea.	+167
	See NOTE 1 for data on unusable fuel			
Oil Capacity	26 qt. total (+101) (includes 12 qt. usable in two integral engine tanks). See NOTE 1 for data on unusable oil			
Max. Oper Limit	30,000 ft. pressure altitude			
Control Surface Movements	Wing flaps	Maximum	43°	
	Aileron tab	Up	7 1/2°	Down 7 1/2° (LH only)
	Aileron tab	Up	15°	Down 15° (LH only)
	(See NOTE 18 & 19)			
	Aileron tab (anti-servo)	Up	14°	Down 8°
	Aileron	Up	20°	Down 20°
	Elevator tab	Up	10°	Down 21°
	Elevator tab (anti-servo)	Up	12°	Down 8°
	Elevator	Up	25°	Down 15°
	Rudder tab	Right	30°	Left 30°
	Rudder	Right	24°	Left 26°
	Rudder	Right	24°	Left 19°
	(See NOTE 17 & 19)			
Serial Nos. Eligible	LJ-76, LJ-114 through LJ-317			

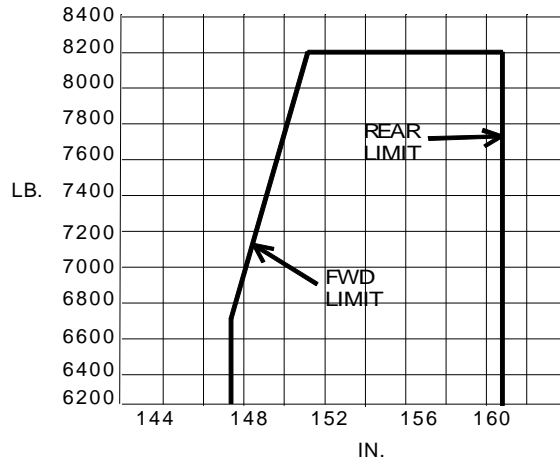
VIII. Model A65, Queen Air, 7 to 9 PCLM (Normal Category), Approved November 3, 1966
Model A65-8200, Queen Air, 11 PCLM (Normal Category), Approved October 9, 1967
Model 70, Queen Air, 11 PCLM (Normal Category), approved November 27, 1968

Engines	2 Lycoming IGSO-480-A1E6 or IGSO-480-A1B6 (Model A65) 2 Lycoming IGSO-480-A1E6 (Models A65-8200 and 70)			
Fuel	100/130 min. grade aviation gasoline			
Engine Limits	(Straight line manifold pressure variation with altitude shown)			
	<u>HP</u>	<u>RPM</u>	<u>MP</u>	<u>Alt</u>
	Takeoff	340	3400	48.0 S.L.
	Takeoff	340	3400	43.5 11,000
	Max continuous	320	3200	45.0 S.L.
	Max continuous	320	3200	41.5 11,000
Propeller and Propeller Limits	1. 2 Hartzell, full-feathering, three-bladed (a) HC-B3Z20-2A hub with 10151-8R or 10151B-8R aluminum alloy blades and 836 spinner. Pitch settings at 30 in. Sta.: low 16°, high 87° Diameter: not over 93 in. , not under 90 in. (b) Woodward hydraulic governor 210365			
Airspeed Limits	Never exceed	270 mph (234 knots)		
	Maximum structural cruising	205 mph (178 knots)		
	Maneuvering	195 mph (169 knots)		
	Maximum flap extension speed			
	Approach position - 50%	200 mph (174 knots)		
	(LC-325 & up - Model A65)			
	(LB-1 & up - Model 70) Full down position - 100%	150 mph (130 knots)		
	Maximum landing gear operating speed: Extension	180 mph (156 knots)		
	Retraction	150 mph (130 knots)		
	Maximum landing gear extended speed	180 mph (156 knots)		

knots)

VIII. Model A65, Model A65-8200, Model 70 (cont'd)

C.G. Range (Landing Gear Extended) (+151.1) to (+160.4) at 8200 lb. (see NOTE 16)
 (+149.9) to (+160.4) at 7700 lb.
 (+147.6) to (+160.4) at 6720 lb. or less
 Straight line variation between points given
 Moment change due to retracting landing gear -2500 in. -lb.



Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 7700 or 8200 lb. (See NOTE 16)
 Landing 7700 or 8200 lb (See NOTE 16)

No. of Seats

Maximum 9 or 11 (2 crew at +129). See NOTE 16.
 See loading instructions for passenger loading.

Maximum Baggage
 (Structural Limits)
 (LC-325 and up)

350 lb. (300 lb. at +267, 50 lb. at +288) (aft compartment)
 350 lb. (+70) (nose compartment)

Maximum Baggage
 (Structural Limits)
 (LC-325 and up)
 (LB-1 and up)

350 lb. (+275) (standard aft compartment)
 250 lb. (+309) (optional aft compartment)
 350 lb. (+ 70) (nose compartment)

Fuel Capacity

	<u>Tank</u>	<u>Cap Gal</u>	<u>Usable Gal</u>	<u>Arm</u>
	(A) L & R Wing	92.5 ea.	90 ea.	+168
or	(B) L & R Wing	109.5 ea.	107 ea.	+166
or	(C) L & R Wing	117.5 ea.	115 ea.	+168
or	(D) L & R Wing	134.5 ea.	132 ea.	+166

Fuel system applicability:

<u>Model</u>	<u>Serial No.</u>	<u>Systems</u>
A65	LC-240 through LC-324	A,C,D
A65	LC-325 and up	B,D
A65-8200	LC-273 through LC-324	A,B,D
70	LB-1 and up	B,D

See NOTE 1 for data on unusable fuel

Oil Capacity

Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138). See NOTE 1 for data on unusable (undrainable) oil.

VIII. Model A65, Model A65-8200, Model 70 (cont'd)

Control Surface Movements	Wing flaps	Maximum	30°		
	Aileron tabs	Up	71/2°	Down	7 1/2° (LH only)
	Aileron tabs anti-servo	Up	14°	Down	8°
		(S/N LC-240 through LC-283)			
	Aileron	Up	20°	Down	20°
	Elevator tab	Up	10°	Down	21°
	Elevator tab anti-servo	Up	12°	Down	8°
	Elevator	Up	25°	Down	15°
	Rudder tab	Right	30°	Left	30°
	Rudder	Right	24°	Left	26°

Serial Nos. Eligible

Model A65-LC-240 through LC-335
 Model A65-8200 - LC-273 through LC-324 (see NOTE 16)
 Model 70 - LB-1 through LB-35

IX. Model 65-A90-1 (Military U-21A, RU-21A, RU-21D, JU-21A, U-21G, RU-21H (GR V)), 12 PCLM (Normal Category), Approved April 27, 1966
Model 65-A90-4 (Military RU-21E, RU-21H (GR II & IV), RU-21H (GR V)), 12 PCLM (Normal Category), Approved December 10, 1971.

Engines 2 United Aircraft of Canada, Ltd., or Pratt & Whitney, PT6A-20 (Turboprop)

Fuel JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); Jet A, Jet A-1, and Jet B
 conforming to P&WC S.B. 1244 or ASTM Spec. D1644.
 See NOTE 5 for emergency fuels.

Oil (Engine and Gearbox) Use MIL-L-7808 or MIL-L-23699

Engine Limits

	Static Sea Level Ratings				
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Max Permissible Turbine Interstage Temp. (Deg. C.)
Takeoff (5 minutes)	550	68	579	2200*	750
Max. Continuous	550	68	579	2200*	750
Strtg. Trans. (2 seconds)					1090
Max. Reverse (1 minute)	300			2100	750

*See NOTE 4.

At low altitudes and low ambient temperature the engines may produce more power at takeoff than the airplane has been certificated for. Under these conditions, the placarded torque meter limitations shall not be exceeded.

Oil Temperatures: -40°F minimum starting
 -40°F to 210°F low idle
 50°F to 210°F maximum continuous
 210°F maximum oil temperature
 not to exceed 5 minutes.

Propeller and Propeller Limits 2 Hartzell HC-B3TN-3B/T10173E-8 or HC-B3TN-3/T10173E-8 or
 HC-B3TN-3/T10173B-8 or HC-B3TN-3M/T10173NB-8 with three blades each.
 Diameter: 93 3/8 in. (Nominal)
 Minimum allowable for repair 90 3/8 in. (no further reduction permitted)
 Pitch settings at 30 in. Sta.:
Reversing Propeller
 Flight idle stop (See NOTE 10)
 Secondary flight idle stop (See NOTE 10)
 Reverse -11°
 Feather 87°

IX. Model 65-A90-1, Model 65-A90-4

Airspeed Limits	Max. operating speed	240 mph (208 knots)			
	Maneuvering speed	195 mph (169 knots)			
	Flaps extended speed	150 mph (130 knots)			
	Maximum landing gear operating speed: Extension	180 mph (156 knots)			
	Retraction	150 mph (130 knots)			
	Maximum landing gear extended speed:	180 mph (156 knots)			
C.G. Range (Landing Gear Extended)	(+153.2) to (+160.4) at 9650 lb. (+144.7) to (+160.4) at 7400 lb. or less Straight line variation between points given Moment change due to retracting landing gear -3825 in. -lb. For diagram see third one of Section VII.				
Empty Wt C.G. Range	None				
Maximum Weight	Takeoff 9650 lb. (See NOTE 24) Landing 9168 lb.				
No. of Seats	Maximum 12 (2 crew at +129). See loading instructions for passenger loading.				
Fuel Capacity	<u>Tank</u>	<u>Cap Gal</u>	<u>Usable Gal</u>	<u>Arm</u>	
	L & R Nacelle	57 ea.	57 ea.	+131	
	L & R Wing	128 ea.	128 ea.	+167	
	See NOTE 1 for data on unusable fuel				
Oil Capacity	28 qt. total (+101) (includes 12 qt. usable in two integral engine tanks). See NOTE 1 for data on unusable oil.				
Max Oper Limits	30,000 ft. pressure altitude				
Control Surface Movements	Wing flaps	Maximum	43°		
	Aileron Tab (left only)	Up	7 1/2°	Down	7 1/2°
	Aileron tab anti-servo	Up	14°	Down	8°
	Aileron	Up	20°	Down	20°
	Elevator tab	Up	10°	Down	21°
	Elevator tab anti-servo	Up	12°	Down	8°
	Elevator	Up	25°	Down	15°
	Rudder tab	Right	30°	Left	30°
	Rudder		Right	24°	Left 26°
Serial Nos. Eligible operated by	LM-1 and up. Prior to civil certification, 65-A90-1 airplanes that have been the military must be modified per Beech dwg. 50-002018 (U21A, U-21G, and RU-21A) or 50-002083 (RU-21D) or 50-002084 (JU-21A) or 91-002052 (RU-21H, GR V). LU-1 and up. Prior to civil certification, 65-A90-4 airplanes that have been operated by the military must be modified per Beech dwg. 91-002050 (RU-21E) or 91-002051 (RU-21H, GR II & IV) or 91-002052 (RU-21H, GR V).				

X. Model B90, King Air, 10 PCLM (Normal Category), Approved November 14, 1967**Model C90, King Air, 10 PCLM (Normal Category), Approved October 23, 1970**

Engines	2 United Aircraft of Canada, Ltd. , or Pratt & Whitney, PT6A-20 (Turboprop) (Model B90)
	2 United Aircraft of Canada Ltd. or Pratt & Whitney, PT6A-20 (Turboprop), PT6A-6/20 (Turboprop), PT6A-20A (Turboprop), or PT6A-21 (Turboprop) (Model C90). See NOTE 21.

X. Model B90, Model C90 (cont'd)

Fuel JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); Jet A, Jet A-1, and Jet B conforming to P&WC S.B. 1244 or ASTM Spec. D1655.
See NOTE 5 for emergency fuels.

Oil (Engine and Gearbox) UACL PT6 Engine Service Bulletin No. 1 lists approved brand oils.

Engine Limits

Static Sea Level Ratings (PT6A-20, PT6A-6/C20, PT6A-20A)

	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Max. Permissible Turbine Interstage Temp. (Deg. C)
Takeoff (5 minutes)	550	72	579	2200*	750
Max. Continuous	550	72	579	2200*	750
Strtg. Trans. (2 seconds)					1090
Max Reverse (1 minute)	300			2100	750

Static Sea Level Ratings (PT6A-21)

	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Max Permissible Turbine Interstage Temp. (Deg. C)
Takeoff (5 minutes)	550	75	580	2200*	695
Max. Continuous	550	75	580	2200*	695
Strtg. Trans. (2 seconds)					1090
Max Reverse (1 minute)	300			2100	695

* See NOTE 4

At low altitudes and low ambient temperature the engines may produce more power at takeoff than that for which the airplane has been certificated. Under these conditions, the placarded torque meter limitations shall not be exceeded.

Oil Temperatures: -40°F minimum starting
-40°F to 210° F low idle
50°F to 210°F max continuous

Propeller and Propeller Limits

Non Reversing Propeller:

2 Hartzell HC-B3TN-2(B)/T10173B-8 or HC-B3TN-2M/T10173NB-8
Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in.
(no further reduction permitted)
Pitch settings at 30 in. Sta.: Low 19°, Feather 87°

Reversing Propeller (For Model C90 Only, See Note 30.)

2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with
T10173E8 or T10173B8 or T10173NB-8 blades
(For Model C90 S/N LJ-954 and after)
2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with Hartzell
T10173K-8 or T10173NK-8 aluminum alloy blades, and Hartzell C-3065-8P
or C-3065-10P or C-3065-12P or C-3065-13P spinner assembly.

Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in.
(no further reduction permitted)
Pitch settings at 30 in. Sta.:

Flight idle stop	(See NOTE 10)
Secondary flight idle stop	(See NOTE 10)
Reverse	-11°
Feather	87°

X. Model B90, Model C90 (cont'd)

Airspeed Limits	Maximum operating speed	240 mph (208 knots)			
knots)	Maneuvering speed	195 mph (169 knots)			
	Flaps extended speed	150 mph (130 knots)			
	Maximum landing gear operating speed: Extension	180 mph (156 knots)			
	Retraction	150 mph (130 knots)			
knots)	Maximum landing gear extended speed	180 mph (156 knots)			
C.G. Range (Landing Gear Extended)	(+153.2) to (+160.4) at 9650 lb. (+144.7) to (+160.4) at 7400 lb. For Model B90 For Model C90 aircraft with PT6A-20, PT6A-6/C20, or PT6A-20A engines (See NOTE 21) (+153.2) to (+160.0) at 9650 lb. (+144.7) to (+160.0) at 7400 lb. For Model C90 aircraft with PT6A-21 engines (See NOTE 21) Straight line variation between points given Moment change due to retracting landing gear -3825 in. -lb.				
Empty Wt. C.G. Range	None				
Maximum Weight	Takeoff: 9650 lb. Landing: 9168 lb.				
No. of Seats	Maximum 10 (2 crew at +129). See loading instructions for passenger loading.				
Maximum Baggage (Structural Limit)	350 lb (+275)				
Fuel Capacity	<u>Tank</u>	<u>Cap Gal</u>	<u>Usable Gal</u>	<u>Arm</u>	
	L & R Nacelle	61 ea.	61 ea.	+131	
	L & R Wing	131 ea.	131 ea.	+167	
	See NOTE 1 for data on unusable fuel.				
Oil Capacity	28 qt. total (+101) (includes 12 qt. usable in two integral engine tanks). See NOTE 1 for data on unusable oil.				
Max. Oper. Limit	30,000 ft. pressure altitude				
Control Surface Movements	Wing flaps	Maximum	43°		
	Aileron tab (left only)	Up	15°	Down	15°
	Aileron	Up	20°	Down	20°
	Elevator tab	Up	10°	Down	21°
	Ele. tab anti-servo	Up	12°	Down	8°
	Elevator	Up	25°	Down	15°
	Rudder tab	Right	30°	Left	30°
	Rudder	Right	24°	Left	19°
Serial Nos. Eligible	Model B90: LJ-318 through LJ-501 Model C90: LJ-502 through LJ-1062				

XI. Model 65-A90-2 (Military RU-21B) and 65-A90-3 (Military RU-21C), 5 PCLM (Normal Category),
Approved March 20, 1969

Engines	2 United Aircraft of Canada, Ltd. or Pratt & Whitney, PT6A-29 (turboprop),
	or 2 United Aircraft of Canada, Ltd. or Pratt & Whitney PT6A-34 (turboprop)

XI. Model 65-A90-2 (cont'd)

Fuel

JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); Jet A, Jet A-1, and Jet B conforming to P&WC S.B. 1244 or ASTM Spec. D1655.
See NOTE 5 for emergency fuels.

Oil (Engine and Gearbox)

PT6A-29 Engine Service Bulletin No. 1 lists approved brand oils.
PT6A-34 Engine Service Bulletin No. 1 lists approved brand oils.

Engine Limits(PT6A-29)

	Static Sea Level Ratings				
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop. Shaft Speed	Max. Permissible Turbine Interstage Temp. (Deg. C)
Takeoff (5 minutes)	620	70	648	2200*	750
Max. Continuous	620	70	648	2200*	750
Strtg. Trans. (2 seconds)					1090
Max Reverse (1 minute)	470			2068	750

*See NOTE 4

At low altitude and low ambient temperature the engines may produce more power at takeoff than that for which the airplane has been certificated. Under these conditions, the placarded torquemeter limitations shall not be exceeded.

Oil Temperatures: -40°F	minimum starting
-40°F to 200°F	low idle
50°F to 200°F	max continuous
210°F	max oil temperature not to exceed 5 min.

Engine Limits (PT6A-34)

	Static Sea Level Ratings				
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop. Shaft Speed	Max. Permissible Turbine Interstage Temp. (deg. C)
Takeoff (5 minutes)	620	82	648	2200*	790
Max Continuous	620	82	648	2200*	790
Strtg. Trans. (2 seconds)					1090
Max Reverse (1 minute)	470			2068	790

*See NOTE 4

At low altitude and low ambient temperature the engines may produce more power at takeoff than that for which the airplane has been certificated. Under these conditions, the placarded torquemeter limitations shall not be exceeded.

Oil temperatures: -40°F	minimum starting
-40°F to 210°F	low idle
50°F to 210°F	max. continuous
210°F	max oil temperature not to exceed 5 minutes

Propeller and Propeller Limits

2 Hartzell HC-B3TN-3B/T10173E-8 or HC-B3TN-3/T10173E-8 or HC-B3TN-3/T10173B-8 or HC-B3TN-3M/T10173NB-8 with three blades each.
Diameter: 93-3/8 in. (Nominal)
Minimum allowable for repair: 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.:

Reversing Propeller

Flight idle stop	(see NOTE 10)
Secondary flight idle stop	(See NOTE 10)
Reverse	-11°
Feather	87°

XI. Model 65-A90-2 (cont'd)**Airspeed Limits**

Maximum operating speed	240 mph (208 knots)
Maneuvering speed	195 mph (169 knots)

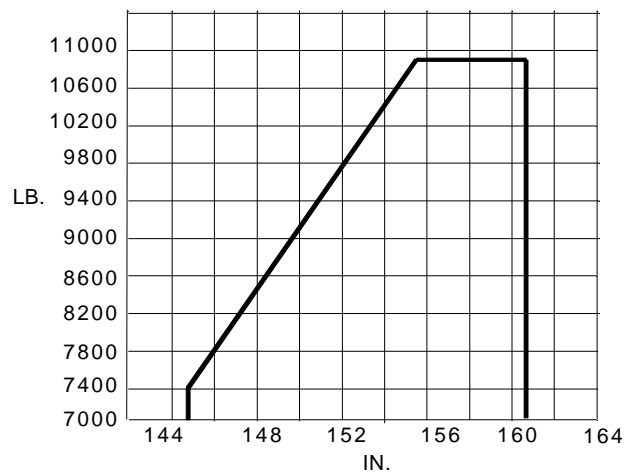
knots)

Maximum flap extended speed	
Approach position 35%	200 mph (174 knots)
Full down flap position - 100%	164 mph (143 knots)
Maximum landing gear operating speed: Extension	180 mph (156 knots)
Retraction	150 mph (130 knots)
Maximum landing gear extended speed	180 mph (156 knots)

knots)

C.G. Range (Landing Gear Extended)

(+155.2) to (+160.4) at 10,900 lb.
 (+144.7) to (+160.4) at 7400 lb or less
 Straight line variation between points given
 Moment change due to retracting landing gear -4500 in. -lb.

**Empty Wt. C.G. Range**

None

Maximum Weight

Takeoff: 10,900 lb.
 Landing: 10,900 lb.

No. of Seats

Maximum 5 (2 crew at +129). See loading instructions for passenger loading.

Fuel Capacity

<u>Tank</u>	<u>Cap. Gal</u>	<u>Usable Gal</u>	<u>Arm</u>
L & R Nacelle	53 ea.	53 ea.	+131
L & R Wing	145 ea.	145 ea.	+165

See NOTE 1 for data on unusable fuel.

Oil Capacity

28 qt. total (+101) (includes 12 qt. usable in two integral engine tanks).
 See NOTE 1 for data on unusable oil.

Control Surface Movements

Wing flaps	Maximum	43°		
Aileron tab (left only)	Up	7-1/2°	Down	7-1/2°
Aileron tab anti-servo	Up	14°	Down	8°
Aileron	Up	20°	Down	20°
Elevator tab	Up	10°	Down	21°
Elevator tab anti-servo	Up	12°	Down	8°
Elevator	Up	25°	Down	15°
Rudder tab	Right	30°	Left	30°
Rudder		Right	24°	Left 19°

Serial Nos. Eligible

LS-1 and up. Prior to civil certification, 65-A90-2 airplanes that have been operated by the military must be modified per Beech dwg. 50-002081.

LT-1 and up. Prior to civil certification 65-A90-3 airplanes that have been operated by the military must be modified per Beech dwg. 50-002082.

XII. Model E90, King Air, 10 PCLM (Normal Category), Approved April 13, 1972

Engines 2 United Aircraft of Canada, Ltd., or Pratt & Whitney, PT6A-28 (turboprop)

Fuel JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); Jet A, Jet A-1, and Jet B conforming to P&WC S.B. 1244 or ASTM Spec. D1655.
See NOTE 5 for emergency fuels.

Oil (Engine and Gearbox) UACL PT6 Engine Service Bulletin No. 1 lists approved brand oils.

Engine Limits**Static Sea Level Ratings**

	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop. Shaft Speed	Max. Permissible Turbine Interstage Temp. (deg. C)
Max. cont. and takeoff	550**	76	580	2200*	750
Strtg. Trans (2 seconds)					1090
Max Reverse (1 minute)	300			2100	750

*See NOTE 4

**Flat rated

At low altitudes and low ambient temperature the engines may produce more power at takeoff than that for which the airplane has been certificated. Under these conditions, the placarded torque-meter limitations shall not be exceeded.

Oil Temperature: -40°F minimum starting
-40°F to 210°F low idle
50°F to 210°F maximum continuous

Propeller and Propeller Limits**Non Reversing Propeller:**

2 Hartzell HC-B3TN-2(B)/T10173B-8

Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair: 90-3/8 in. (no further reduction permitted)

Pitch settings at 30 in. Sta.: Low 19°, Feather 87°

Reversing Propeller (See Note 30.)

2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with T10173E8 or T10173B8 or T10173NB-8 blades.

(For Model E90 S/N LW-348 and after only): 2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with Hartzell T10173K-8 or T10173NK-8 aluminum alloy blades, and Hartzell C-3065-8P or C-3065-10P or C-3065-12P or C-3065-13P spinner assembly.

Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair: 90-3/8 in. (no further reduction permitted)

Pitch settings at 30 in. sta.:

Flight idle stop	(See NOTE 10)
Secondary flight idle stop	(See NOTE 10)
Reverse	-11°
Feather	87°

Airspeed Limits

Maximum Operating Speed	260 mph (226 knots)
Maneuvering	202 mph (175 knots)
Flaps extended speed	150 mph (130 knots)
	(S/N LW-1 through LW-42)
	161 mph (140 knots)
	(S/N LW-43 and after)

XII. Model E90 (cont'd)

Airspeed Limits (cont'd)	Maximum Landing Gear Operating Speed:	Extension	180 mph (156 knots)
		Retraction	150 mph (130 knots) (S/N LW-1 through LW-42) 168 mph (146 knots) (S/N LW-43 and after)
	Maximum Landing Gear Extended Speed:		180 mph (156 knots)
C.G. Range (Landing Gear Extended)	(+152.0) to (+160.0) at 10,100 lb. (+144.7) to (+160.0) at 7850 lb. or less Straight line variation between points given Moment change due to retracting landing gear -3825 in. -lb.		
Empty Wt. C.G. Range	None		
Maximum Weight	Takeoff: 10,100 lb. Landing: 9,700 lb.		
No of Seats	Maximum 10 (2 crew at +129). See loading instructions for passenger loading.		
Maximum Baggage (Structural Limit)	350 lb. (+275)		
Fuel Capacity	<u>Tank</u>	<u>Cap Gal</u>	<u>Usable Gal</u>
	L & R Aux	41 ea.	41 ea.
	L & R Main	196 ea.	196 ea.
	See NOTE 1 for data on unusable fuel.		
Oil Capacity	28 qt. total (+101) includes 12 qt. usable in two integral engine tanks. See NOTE 1 for data on unusable oil.		
Control Surface Movements	Wing flaps	Maximum	43°
	Aileron tab (left only)	Up	15°
	Aileron	Up	20°
	Elevator tab	Up	10°
	Elevator tab anti-servo	Up	12°
	Elevator	Up	25°
	Rudder Tab	Right	30°
	Rudder	Right	24°
			Left
			19°
Serial Nos. Eligible	Model E90: LW-1 and up		

XIII. Model H90, King Air, (T-44A), 10 PCLM (Normal Category), Approved March 23, 1977

Engines	2 United Aircraft of Canada, Ltd., or Pratt & Whitney, PT6A-34B (Turboprop)
Fuel	JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); Jet A, Jet A-1, and Jet B conforming to P&WC S.B. 1244 or ASTM Spec D1655. See NOTE 5 for emergency fuels.
Oil (Engine and Gearbox)	UACL PT6 Engine Service Bulletin No. 1 lists approved brand oils.

XIII. Model H90 (cont'd)
Engine Limits

Static Sea Level Ratings					Max. Permissible Turbine Interstage Temp (Deg. C)
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop. Shaft Speed	
Max Cont & Takeoff	550**	74	579	2200*	790
Strtg. Trans (2 seconds)					1090
Max. Reverse (1 minute)	300			2100	790

*See NOTE 4

**Flat rated

At low altitude and low ambient temperature the engines may produce more power at takeoff than that for which the airplane has been certificated. Under these conditions, the placarded torque meter limitations shall not be exceeded.

Oil Temperatures:	-40°F	minimum starting
	-40°F to 210°F	low idle
	50°F to 210°F	maximum continuous

Propeller and Propeller Limits

Reversing Propeller (See Note 30.)

2 Hartzell HC-B3TN-3B or HC-B3TN-3M hubs with T10173B8 or T10173NB-8 blades.

Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in. (no further reduction permitted)

Pitch settings at 30 in. Sta.:

Flight idle stop	(See NOTE 10)
Reverse	-11°
Feather	87°

Airspeed Limits

Maximum operating speed	260 mph (226 knots)
Maneuvering	203 mph (175 knots)
Flaps extended speed	161 mph (140 knots)
Maximum landing gear operating speed: Extension	180 mph (156 knots)
Retraction	168 mph (146 knots)
Maximum landing gear extended speed	180 mph (156 knots)

knots)

See NOTE 23

C.G. Range (Landing Gear Extended)

(+152.4) to (+160.0) at 10,200 lb.
(+144.7) to (+160.0) at 7,850 lb.
Straight line variation between points given
Moment change due to retracting landing gear -3825 in.-lb.

Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 10,200 lb.
Landing 9,700 lb.

No. of Seats

Maximum 10 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural Limit)

350 lb. (+277)

Fuel Capacity

<u>Tank</u>	<u>Cap Gal</u>	<u>Usable Gal</u>	<u>Arm</u>
L & R Aux.	61 ea.	61 ea.	+135
L & R Main	131 ea.	131 ea.	+165

See NOTE 1 for data on unusable fuel.

Oil Capacity

28 qt. total (+101) includes 12 qt. usable in two integral engine tanks.

See NOTE 1 for data on unusable oil.

XIII. Model H90 (cont'd)

Maximum Operating Limit	31,000 ft. pressure altitude					
Control Surface Movements	Wing flaps	Maximum	43°			
	Aileron tab (left only)	Up	15°	Down	15°	
	Aileron	Up	20°	Down	20°	
	Elevator Tab	Up	10°	Down	21°	
	Elevator tab anti-servo	Up	12°	Down	8°	
	Elevator	Up	25°	Down	15°	
	Rudder tab	Right	30°	Left	30°	
	Rudder		Right	24°	Left	19°
Serial Nos. Eligible	Model H90 (T-44A): LL-1 and up					

XIV. Model C90A, King Air, (Normal Category), Approved December 1, 1983

Engines	2 Pratt & Whitney Aircraft of Canada, Ltd. PT6A-21 (Turboprop)
Fuel	JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); Jet A, Jet A-1, and Jet B conforming to P&WC S.B. 1244 or ASTM Spec D1655. See NOTE 5 for emergency fuels.
Oil (Engine and Gearbox)	P&WC PT6 Engine Service Bulletin No. 1 lists approved brand oils

Engine Limits

	Shaft Horsepower	N ₁ Gas Generator Speed	Prop Shaft Speed	Max. Permissible Turbine Interstage Temp. (Deg. C)
Takeoff (5 minutes)	550	101.5	2200*	695
Max Continuous	550	101.5	2200*	695
Starting Transient (2 seconds)		102.6		1090
Max Reverse (1 minute)	300	88.0	2100	695

* See NOTE 4

At low altitude and low ambient temperature the engines may produce more power at takeoff than that for which the airplane has been certificated. Under these conditions, the placarded torque meter limits shall not be exceeded.

Oil temperatures: -40°F	minimum starting
-40°F to 210°F	low idle
50°F to 210°F	max. continuous

Propeller and Propeller Limits

Reversing Propeller (See Note 30.)

2 Hartzell HC-B3TN-3M or HC-B3TN-3B hubs with T10173K-8 or T10173NK-8 blades.
Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.:

Flight idle stop	(See NOTE 10)
Secondary flight idle stop	(See NOTE 10)
Reverse	-11°
Feather	87°

Propeller and Propeller Limits
S/N LJ-1063 through LJ-1287,
LJ-1288 through LJ-1294
LJ-1296 through LJ-1299

Non Reversing Propeller

2 Hartzell HC-B3TN-2(B)/T10173B-8
Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.: Low 19°, Feather 87°

XIV. Model C90A (cont'd)

S/N LJ-1288, LJ-1295

LJ-1302, LJ-1303, LJ-1305

thru LJ-1308, LJ-1311, LJ-1312

LJ-1314 thru LJ-1316, LJ-1318

LJ-1320 thru LJ-1366, LJ-1368

thru LJ-1372, LJ-1378 thru

LJ-1383, LJ-1385, LJ-1387,

LJ-1388, LJ-1390 thru LJ-1393,

LJ-1395, LJ-1396, LJ-1398 thru

LJ-1402, LJ-1404 thru LJ-1410,

LJ-1412 thru LJ-1424, LJ-1426

thru LJ-1430, LJ-1432 thru

LJ-1434, LJ-1436 and after.

Reversing Propeller

2 McCauley 4HFR34C768 hubs with 94LMA-4 blades

Diameter: 90 in. (Nominal) Minimum allowable for repair

89 in. (no further reduction permitted)

Pitch settings at 30 in. sta.:

Flight Idle Stop (See NOTE 27)

Reverse $-10^{\circ} \pm .2^{\circ}$ Feather $85.8^{\circ} \pm .2^{\circ}$

minimum idle speed 1100 rpm

Airspeed Limits

S/N LJ-1063 through

LJ-1137 and LJ-1146

Maximum operating speed

CAS

260 mph

CAS

(226 knots)

CAS

226 knots

Maneuvering

176 mph

(153 knots)

153 knots

Flaps extended speed

161 mph

(140 knots)

148 knots

Maximum landing gear operating speed

Extension

209 mph

(182 knots)

182 knots

Retraction

189 mph

(164 knots)

163 knots

Maximum landing gear extended speed

209 mph

(182 knots)

182 knots

S/N LJ-1138 through LJ-1145

Maximum operating speed

260 mph

(226 knots)

226 knots

Maneuvering

195 mph

(169 knots)

169 knots

LJ-1147 and after

Flaps extended speed

161 mph

(140 knots)

140 knots

Maximum landing gear operating speed

Extension

209 mph

(182 knots)

182 knots

Retraction

189 mph

(164 knots)

163 knots

Maximum landing gear extended speed

209 mph

(182 knots)

182 knots

C.G. Range (Landing Gear
Extended)

(+153.2) to (+160.0) at 9650 lb.

(+144.7) to (+160.0) at 7400 lb. or less

S/N LJ-1063 through

Straight line variation between points given

LJ-1137 and LJ-1146

Moment change due to retracting landing gear -3825 in. -lb.

C.G. Range (Landing Gear
Extended)

(+152.0) to (+160.0) at 10,100 lb.

(+151.7) at 9999 lbs. (Note 28)

(+144.7) to (+160.0) at 7850 lb or less

S/N LJ-1138 through

Straight line variation between points given

LJ-1145, LJ-1147 and after

Moment change due to retracting landing gear -3825 in. -lb.

(See Note 28)

Empty Wt. C.G. Range

None

Maximum Weight

Ramp:

9710 lb.

Landing:

9168 lb.

S/N LJ-1063 through

Takeoff:

9650 lb.

LJ-1137 and LJ-1146

Maximum Weight

Ramp:

10,160 lb.

Landing:

9600 lb.

S/N LJ-1138 through

Takeoff:

10,100 lb.

LJ-1145, LJ-1147 and after

No. of Seats

Maximum 13 (including 2 at +129). See loading instructions for passenger loading.

Maximum Baggage
(Structural Limit)

350 lb. (+275)

350 lb. (+70) (Baggage and Avionics)

Fuel Capacity

TankCap GalUsable GalArm

L & R Nacelle

61 ea.

61 ea.

+131

L & R Wing

131 ea.

131 ea.

+167

See NOTE 1 for data on unusable fuel.

Oil Capacity	28 qt. total (+101) (includes 12 qt. usable in two integral engine tanks.) See NOTE 1 for data on unusable oil.
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Control Surface Movements	Wing flaps	Maximum	43°		
	Aileron tab (left only)	Up	15°	Down	15°
	Aileron	Up	20°	Down	20°
	Elevator tab	Up	10°	Down	21°
	Elevator tab anti-servo	Up	12°	Down	8°
	Elevator	Up	25°	Down	15°
	Rudder tab	Right	30°	Left	30°
	Rudder		Right	24°	Left

Data Pertinent to All Models

Leveling Means	2 external screws on left side of fuselage forward or aft of entrance door.
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Certification basis

[illegible]

Additional applicable paragraphs to certification basis:

23.959 and 23.1583(a) of Am. 23-7 to FAR 23; 23.143(a), 23.145(d), 23.153, 23.173(a), and 23.161(c)(3) of Am.23-14 to FAR 23; 23.175 of Am. 23-17 to FAR 23; 23.967(a)(5) of Am. 23-18 to FAR 23; 23.1545(a) of Am. 23-23 to FAR 23; 23.729 of Am. 23-26 to FAR 23; 25.831(d) of Am. 25-41 to FAR 25; Part 36 dated December 1, 1969, through Am. 36-10; and SFAR 27 dated February 1, 1974, as amended through 27-4. Effective April 17, 1992, Electronic Flight Instrument Systems shall meet the requirements of FAR 23.1301, 23.1309, 23.1311, 23.1321, 23.1322, and 23.1335 as amended through Amendment 23-41. Effective January 20, 1994, FAR 23.1457 as amended by Amendment 23-35.

Application for Type Certificate dated May 1, 1958

Type Certificate No. 3A20 issued February 4, 1959, obtained by the manufacturer under delegation option procedures.

Production Basis: Production Certificate No. 8. Delegation Option Manufacturer No. CE-2 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.

Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition the following items of equipment are required:

1. Pre-stall warning indicator, Safe Flight Corp. , P/N 168-2 or P/N 168-3, to be used if deicing equipment is installed per Beech Dwg. 50-369100 and 50-361100.
2. Pre-stall warning indicator, Safe Flight Instrument Corp., P/N 793-1 or P/N 795-3, to be used if

deicing

equipment is installed per Beech Dwg. 50-369100 and 50-361100 for Models 65-A90 and B90.

3. Pre-stall warning indicator, Safe Flight Instrument Corp., P/N 168-3 to be used if deicing equipment is installed per Beech dwg. 50-970103 and 50-361104 or 91-361001 for Models 65-A90-1, 65-A90-2, 65-A90-3, and 65-A90-4.
4. Pre-stall warning indicator, Safe Flight Instrument Corp., P/N 795-1 for Model C90 and C90A.
5. Pre-stall warning indicator, Safe Flight Instrument Corp. , P/N 795-5 for Model E90.
6. Pre-stall warning system, Rosemount P/N 92AT for Model H90 (T-44A).
7. FAA Approved Airplane Flight Manual or Pilot's Operating Handbook
 - (a) Model 65-90* S/N LJ-1 through LJ-113
 - Model 65-A90* S/N LJ-114 through LJ-317, LJ-317, LJ-76, LJ-178A

*Model 65-90 and 65-A90 aircraft were delivered in and/or are modified by Beech kits to various configurations with non-reversing and reversing propellers: with PT6A-6, -20, -20A, and -21 engines, and at 9300 and 9650 lbs. An FAA Approved Airplane Flight Manual appropriate to the aircraft configuration is required. Refer to the Limitations Section of FAA Approved Airplane Flight Manual Supplement, P/N 131044, for equipment requirements for flight into known icing conditions.

- (b) Model B90 P/N 65-001123-31 S/N LJ-318 through LJ-501
 - Model C90 P/N 90-590010-5 S/N LJ-502 through LJ-624
 - Model C90 P/N 90-590010-53 S/N LJ-625 through LJ-667 and LJ-670
- Refer to the Limitations Section of FAA Approved Airplane Flight Manual Supplement, P/N 131044, for equipment requirements for flight into known icing conditions.

- (c) Model E90 P/N 90-590012-5 S/N LW-1 through LW-347
- Model C90 P/N 90-590010-61 S/N LJ-668 through LJ-1010 except LJ-670, LJ-986 and LJ-996
- Model C90 P/N 90-590010-87 S/N LJ-986, LJ-996, LJ-1011 through LJ-1062
- Model C90A P/N 90-590024-5 S/N LJ-1063 through LJ-1137 and LJ-1146
- Model C90A P/N 90-590024-23 S/N LJ-1138 through LJ-1145, LJ-1147 through LJ-1287, LJ-1289 through LJ-1294, LJ-1296 through LJ-1299
- Model C90A P/N 90-590024-35 S/N LJ-1288, LJ-1295, LJ-1302, S/N LJ-1303, LJ-1305 thru LJ-1308, LJ-1311, LJ-1312, LJ-1314 thru LJ-1316, LJ-1318, LJ-1320 thru LJ-1352
- Model C90A P/N 90-590024-43 S/N LJ-1300, LJ-1301, LJ-1304, LJ-1309, LJ-1310 LJ-1313, LJ-1317 and LJ-1319
- Model C90A P/N 90-590024-61 S/N LJ-1367, LJ-1373, LJ-1377, LJ-1384, LJ-1386, LJ-1389, LJ-1394 and LJ-1397, LJ-1403, LJ-1411, LJ-1425, LJ-1431 and LJ-1435
- Model C90A P/N 90-590024-69 S/N LJ-1353 and after, except -61 manual serial

Refer to the Limitations Section of the FAA Approved Airplane Flight Manual or Pilot's Operating Handbook for equipment requirements for flight into known icing conditions.

- NOTE 1 At the time of original certification, the following must be provided for each aircraft: current weight and balance data; loading information; list of equipment included in the empty weight.
- The Certificated Empty Weight must include unusable fuel and unusable (or unusable (undrainable)) oil as shown below:
- Fuel 15 lbs. (+162 in.) and oil 21 lbs. (+111 in.) for Models 65 (L-1 and up, LF-1 and up, and LC-1 through LC-229), 65-80, 65-A80, 65-A80-8800, 65-88 (except LP-28), 65-B80 (LD-270 through LD279 unless S.I. 0539-281 is incorporated).
- Fuel 30 lbs. (+170 in.) and oil 21 lbs. (+111 in.) for Models 65 (LC-230 and up), 65-88 (LP-28 only), A65, A65-8200, 70, 65-B80 (LD-280 through LD-467 unless S.I. 0539-281 is incorporated).
- Fuel 96 lbs. (+168 in.) and oil 21 lbs. (+111 in.) for Model 65-B80 (prior to LD-468 that have S.I. 0539-281 incorporated).
- Fuel 24 lbs. (+140 in.) and oil 16 lbs. (+101 in.) for Model 65-90. Fuel 24 lbs. (+140 in.) and oil 28 lbs. (+101 in.) for Models 65-A90. Fuel 24 lbs. (+140 in.) and oil 32 lbs. (+101 in.) for Models 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, and B90.
- The Basic Empty Weight must include unusable fuel and engine oil (includes capacity oil and undrainable, where applicable) as shown below:
- Fuel 96 lbs. (+168) and oil 81 lbs. (+131) for Model 65-B80 (LD-468 and up). Fuel 24 lbs. (+140) and oil 56 lbs. (+101) for Model C90, C90A, and H90 (T-44A). Fuel 40 lbs. (+140) and oil 56 lbs. (+101) for Model E90.
- NOTE 2 The following placard must be displayed in full view of the pilot:
“This airplane must be operated as a normal category airplane in compliance with the operation limitations stated in the form of placards, markings, and manuals.”
- NOTE 3 Mandatory retirement time for all fuselage structural components of Models 65-88, 65-90, 65-A90, B90, and
- C90 (prior to LJ-1011 except LJ-986 and LJ-996) is 20,000 hours time in service. However, the Fuselage Life may be unlimited if the airplane is maintained and inspected at the required intervals in Chapter 5 (or Chapter 4 or Airworthiness Limitations Section, as appropriate) of the Airplane’s Maintenance Manual.
- For the Model C90 (LJ-986, LJ-996, LJ-1011 and after), the retirement limit is 13,500 hours time in service.
- However, the Fuselage Life may be unlimited if the airplane is maintained and inspected at the required intervals in Chapter 5 (or Chapter 4 or Airworthiness Limitations Section, as appropriate) of the Airplane’s Maintenance Manual.
- For the E90 and H90 fuselage pressure vessel structural life limit, refer to the latest revision of the airplane flight manual for mandatory retirement time.
- For the Model C90A, the retirement limit is 13,500 hours time in service. However, the Fuselage Life may be unlimited if the airplane is maintained and inspected at the required intervals in Chapter 5 (or Chapter 4 or Airworthiness Limitations Section, as appropriate) of the Airplane’s Maintenance Manual
- or
- NOTE 4 The maximum propeller shaft overspeed limits for Models 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, E90, and H90 (T-44A) is 104 percent at all ratings and may be employed for sustained periods in emergencies. 100 percent propeller shaft speed is defined as 2200 rpm and is the normal steady state operating limit. Gas generator speeds up to 102.7 percent are permissible for 10 seconds and to 101.6 percent for unlimited periods subject to applicable temperature and other limits. 100 percent gas generator speed is defined as 37,500 rpm.
- NOTE 5 Emergency use of MIL-G-5572:
Grades 80/87, 91/98, 100/130, and 115/145 are permitted on Models 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, C90A, E90, and H90 (T-44A) for a total time period not to exceed 150 hours during any overhaul period. It is not necessary to purge the unused fuel from the system when switching fuel types.

- NOTE 6 (a) Required for Model 65, S/N LC-163 through LC-239: 2 Lycoming IGSO-480-A1E6 engines. Aircraft prior to S/N LC-163 eligible for IGSO-480-A1E6 engines provided FAA approval related equipment is installed; such as, Bendix fuel injector, cockpit and engine control system, higher pressure engine and boost pumps, induction air modification, etc.
- (b) Required for Model 65, S/N LC-163 through LC-239: Hartzell HC-B3Z20-2A hub with 10151-8R or 10151B-8R aluminum alloy blades and 210365 Woodward governor.
- NOTE 7 Model 65-90 (S/N LJ-1 through LJ-22) eligible for maximum landing weight of 8835 lb. and a maximum takeoff weight of 9300 lb. when modified per Beech Kit No. 90-4001. Subsequent serials are eligible for these weights.
- NOTE 8 Model 65-80 (S/N LD-1 through LD-150, except LD-34) eligible for a maximum landing weight of 8000 lb. when modified per Beech Mod. C.O. C00766.
- NOTE 9 Model 65-A80 (S/N LD-151 through LD-269) eligible for a maximum landing and takeoff gross weight of 8800 lb. when modified per Beech dwg. 80-4004 which defines Modification Kit No. 80-4004-1 (S/N LD-254 through LD-269) and Kit No. 80-4004-3 (S/N LD-151 through LD-253). Upon completion of this modification, the aircraft is eligible for designation as a Model 65-A80-8800.
- NOTE 10 standard Flight idle at 2000 propeller rpm shall be an indicated 600 ± 60 ft. -lb. torque corrected for sea level day. Secondary flight idle stop when installed shall be 210 ± 40 propeller rpm higher than flight idle stop with a gas generator speed of 70%.
- NOTE 11 Model 65-90 (S/N LJ-1 through LJ-113) (except LJ-76) are eligible for installation of PT6A-20 engines when modified in accordance with Beech Kit 90-9027 or 90-9027 and 90-9029. For airplane LJ-9, use Beech Kit 90-9007. For airplane LJ-24, use Beech dwgs. 90-9016 and 90-9023 for PT6A-20 engine installation.
- NOTE 12 Model 65-90 (S/N LJ-24) eligible for full feathering, three-bladed Hartzell HC-B3TN-3B/T10173E-8 reversing propeller installation when modified per Beech dwgs. 90-9016 and 90-9023.
- NOTE 13 Model 65-90 (S/N LJ-1 through LJ-113) equipped with PT6A-6 engines eligible for full-feathering, three bladed Hartzell HC-B3TN-3B/T10173E-8 or HC-B3TN-3B/T10173B-8 reversing propeller installation when modified per Beech dwg. 90-9028.
- NOTE 14 Models A65 and A65-8200 (S/N LC-240 through LC-335), 65-80, 65-A80, 65-A80-8800, 65-B80 (S/N LD-1 and up), and 70 (S/N LB-1 through LB-35) eligible to operate with cabin door removed when operated as prescribed in Approved Airplane Flight Manual Supplement No. 130758.
- NOTE 15 Model 65, A65, 65-80, 65-A80, 65-A80-8800, 65-B80, 70 eligible for installation of cargo door when modified per Beech Kit No. 65-4014.
- NOTE 16 Model A65-8200 (S/N LC-273 through LC-324) when manufactured per Beech dwg. 50-000200 and Model 70 (S/N LB-1 through LB-35) are eligible for a maximum weight of 8200 lbs. and 11 place seating capacity.
- NOTE 17 Model 65-A90 (S/N LJ-76 and LJ-114 through LJ-301) when modified per Beech Kit No. 90-4032, and Model 65-A90 (S/N LJ-302 through LJ-317) when modified per Beech Kit No. 90-4032-1 eligible for maximum landing weight of 9168 lb. and a maximum takeoff weight of 9650 lb.
- NOTE 18 Model 65-A90 (S/N LJ-76 and LJ-114 through LJ-317) when modified per Beech Kit No. 90-4035 eligible to move forward center of gravity limit 2.9 in. forward.
- NOTE 19 Model 65-A90 (S/N LJ-76 and LJ-114 through LJ-301) when modified per Beech Kit Nos. 90-4031 or 90-4032 and 90-4035, and 65-A90, (S/N LJ-302 through LJ317) when modified per Beech Kit Nos. 90-4031-1 or 90-4032-1 and 90-4035 eligible for maximum landing weight of 9168 lb., maximum takeoff weight of 9650 lb., and to move forward center of gravity limit 2.9 in. forward.
- NOTE 20 Model 65-B80 eligible for optional Cargo Baggage Pod installation when modified per Beech Kit No.

80-4013.

- NOTE 21 Model C90 aircraft, LJ-670 and LJ-584 through LJ-667 except LJ-585, LJ-590, LJ-592, LJ-593, LJ-601, LJ-604, LJ-612, LJ-619, LJ-620, LJ-622, and LJ-652 are equipped with PT6A-20A engines. Model C90 Aircraft LJ-668, LJ-669, LJ-671 and after are equipped with PT6A-21 engines. Model C90 aircraft with PT6A-20A engines are eligible for installation of PT6A-21 engines when modified per Beech Kit Drawing No. 90-9066.
- NOTE 22 Model H90 (T-44A) airplanes are eligible for FAA certification as Model H90 aircraft when modified as required by Beech Aircraft Corporation Drawing 90-005004.
- NOTE 23 Model H90 (T-44A) airplanes are licensed at gross weight of 9650 lb. and gross weight C.G. range of 150.6 to 160.0 inches at 9650 lb., and C.G. range of 144.7 to 160.0 inches at 7850 lb. or less.
- NOTE 24 The following U-21 series aircraft are eligible for maximum takeoff weight of 10,200 lbs. and maximum landing weight of 9,700 lbs., when modified with Beech Kit 91-5002-1:
- a. 65-A90-1 (RU-21A) aircraft serial numbered LM-108 through LM-111.
 - b. 65-A90-1 (RU-21H, GUARDRAIL V) aircraft serial numbered LM-101, LM-107, LM-115, LM-125, LM-127 through LM-129, LM-132, LM-133, and LM-136 through LM-138.
 - c. 65-A90-4 (RU-21H, GUARDRAIL V) aircraft serial numbered LU-2, LU-5, LU-6, LU-9 through LU-13, and LU-15.
- These aircraft must be equipped with wingtip H.F. antenna pods and wingtip extensions, or equivalent ballast, as specified on Drawing 91-5001, in order to operate at the increased weights.
- NOTE 25 Export:
- a. The Beech Model C90 is eligible for export to United Kingdom when modified in accordance with Modification Drawing 90-005000.
 - b. The Beech Model C90A is eligible for export to United Kingdom when modified in accordance with Modification Drawing 90-005006.
- The above models are eligible for return to U.S. certification when the modifications incorporated by the above drawings have been removed.
- NOTE 26 Models 65-90, 65-A90, B90, C90, C90A, and E90 are eligible for flight into known icing conditions when the required equipment is installed and operational.
- NOTE 27 Flight idle propeller low pitch stop is set so that at 2000 rpm the engine torque is 608 ± 40 ft. lb. torque corrected to sea level standard day conditions. Ground idle low pitch stop is set so that at 58% to 60% N₁, prop rpm is not less than 1100 rpm.
- NOTE 28 Model C90A Airplanes which incorporate MOD Drawing MOD005147-1 are limited to a maximum ramp weight of 10,059 lbs., a maximum takeoff weight of 9,999 lbs., and a maximum landing weight of 9,600 lbs. MOD Drawing MOD005147-1 requires an AFM and POH supplement PN 90-590024-81 and an operating weight limitation placard, MOD005147-3. Eligible Serial Numbers are LJ-1469 and after.
- NOTE 29 Company name change effective April 15, 1996. The following serial numbers are manufactured under the name of Raytheon Aircraft Company: C90A: LJ-1437 and up
- NOTE 30 By model, any combination of reversing hub and blade part numbers listed is acceptable. It is permissible to mix blade part numbers on the same hub.

Contact Raytheon Aircraft Company as necessary to obtain availability information concerning the drawings and kits which are referenced by this publication.

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